AUTHOR: Bondareva, T.P. and Samodurov, V.I. 5-6-6/42

TITLE: New Strata of the Pliocene Deposits in the Eastern Part of the Turgay Depression (O novoy svite otlozheniy pliotsena v vostochnoy chasti Turgayskogo progiba)

PERIODICAL: Byulleten' Moskovskogo Obshchestva Ispytateley Prirody, Otdel Geologicheskiy, 1957, # 6, pp 93-100 (USSR)

ABSTRACT: The author describes new strata of alluvial deposits, unknown thus far, which occur in the low watershed between the rivers of Kara-Turgay and Ulu-Zhilanchik in the eastern part of the Turgay depression.

As these strata are more ancient than the valleys which, according to V.A. Lindgol'm and A.P. Sigov, existed already in the Middle-Pliocene epoch, their age can thus be determined as Lower-Pliocene.

It is proposed to name these strata the Katpagan suite after Lake Katpagan located between the two above mentioned rivers.

The author gives a detailed petrographic description of the rocks and mineralogical composition of the sands building the Katpagan suite.

He concludes that the study of the composition and thickness

Card 1/2

New Strata of the Pliocene Deposits in the Eastern Part of the Turgay Depression.

of this suite are of a great practical importance, because its sandy rocks are associated with occurrence of fresh water.

The article contains 1 map, 2 tables, and 8 Russian references.

AVAILABLE: Library of Congress

Card 2/2

BONDAREVA, T.P.

Paralleling the Chegan series of the Turgay Depression with the section of marine Paleogene deposits of Central Asia. Dokl. AN SSSR 136 no.6:1411-1413 F '61. (MIRA 14:3)

1. Geologicheskiy institut AN SSSR. Predstavleno akademikom A. L. Yanshinym.

(Turgay Gates---Geology, Stratigraphic)

BONDAREVA, T.P.; SAMODUROV, V.I.

Recent data on the stratigraphy of Paleogene deposits in the northern part of the Aral Sea region. Dokl. AN SSSR 140 no.3:655-657 S '61. (MIRA 14:9)

1. Geologicheskiy institut AN SSSR. Predstavleno akademikom A.L. Yanshinym.

(Aral'sk region--Geology, Stratigraphic)

BONDAREVA, T.P.; NEMKOV, G.I.; SAMODUROV, V.I.

Age of the Tas-Aran series in the northern part of the Aral Sea region. Dokl. AN SSSR 140 no.4:892-894 O '61. (MIRA 14:9)

1. Geologicheskiy institut AN SSSR i Moskovskiy geologorazvedochnyy institut im. S.Ordzhonikidze. Predstavleno akademikom A.L. Yanshinym.

(Aral'sk region--Geology, Stratigraphic)

BONDAREVA, T.P.

Studying the anodic behavior of zirconium, niobium, and vanadium. Sbor.nauch.rab.asp. VGU no.2:37-45 '62.
(MIRA 18:11)

ACCESSION NR: AT4010280 S/3053/62/000/000/0280/0282

AUTHOR: Shatalov, A. Ya.; Bondareva, T.P.

TITLE: The electrochemical behavior of zirconium in sulfuric and hydrochloric acids

SOURCE: Trudy* Vsesoyuznoy mezhvuzovskoy nauchnoy konferentsii po voprosam bor'by* s korroziyey, Baku, 1962. Moscow, 1962, 280-282

TOPIC TAGS: zirconium, electrochemistry, anode polarization, polarization, oxidation, corrosion

ABSTRACT: The authors measured the electrode potentials of zirconium in solutions of sulfuric and hydrochloride acids in an atmosphere of hydrogen, oxygen, and air. In the HCl solutions with hydrogen passed through, relatively reproducible potential values connected with the process of self-diffusion were obtained. In an atmosphere of oxygen or air, the electrode potentials of zirconium showed a marked tendency toward passivation (inhibition of corrosion). With anode polarization of the zirconium in HCl after an original rapid rise, a constant potential was established which did not vary, despite changes in the current density, but which was a function of the HCl concen-

Card 1/2

ACCESSION NR: AT4010280

tration. With anode polarization of the zirconium in 1 N H_2SO_4, studied in an interval of 20 - 270 ma/cm^2, there was a continuous rise in the potential reaching several tens of volts. The zirconium potential depended on the amount of electricity passed through the solution. With anodic oxidation there was, together with the rise in potential, a regular decrease in the capacity of the zirconium anode and a rise in cross resistance. The temporary change in capacitance can be explained by assuming a linear law for the increase in thickness of the oxide film with time. Orig. art. has: 2 figures.

ASSOCIATION: Voronezhskiy gosudarstvenny*y universitet (Voronezh State University)

SUBMITTED: 00 DATE ACQ: 28Jan64 ENCL: 00

SUB CODE: CH, ML NO REF SOV: 001 OTHER: 001

Card 2/2

SHATALOV, A.Ya.; BONDAREVA, T.P.

Kinetics of the anodic oxidation of niobium. Dokl. AN SSSR 147 no.5:1137-1140 D '62. (MIRA 16:2)

1. Voronezhskiy gosudarstvennyy universitet. Predstavleno akademikom A.N. Frumkinym.

(Niobium) (Oxidation, Electrolytic)

SHATALOV, A.Ya.; BONDAREVA, T.P.; TSYGANKOVA, L.Ye.

Anodic oxidation of vanadium and niobium. Izv.vys.ucheb.zav.;khim.i khim.tekh. 6 no.4:631-636 '63. (MIRA 17:2)

1. Voronezhskiy gosudarstvennyy universitet. Kafedra fizicheskoy khimii.

L 12680-63

ACCESSION NR: AP3000648 S/0080/63/036/003/0588/0594

EWP(q)/EWI(m)/BDS AFFTC/ASD JD/JG

AUTHOR: Shatalov, A. Ye.; Bondareva, T. P.; Tsy*gankova, L. Ye. 56

TITLE: Electrochemical research on the passivation of niobium and vanadium 27 27

SOURCE: Zhurnal prikladnoy khimii, v. 36, no. 3, 1963, 588-594

TOPIC TAGS: passivation, anodizing oxides, polarization, repassivation, niobium, vanadium

ABSTRACT: The behavior of the electrode potentials of niobium and vanadium during anodic polarization in acid and caustic solutions was investigated. The potential of Nb, with constant current density, increased with time of polarization and reached a voltage of several tenths of a hundred. In the beginning sections of the polarization curves, there is a proportionality between the potential reached and the quantity of electricity, independent of the current strength applied to the electrode. The potentials of the Nb anode in hydrochloric, nitric, sulfuric, phosphoric acid solutions cannot be reduced to one but to the ohmic drop in voltage as a result of the anodizing layer of oxide. The electrode potentials of the V anode on the part of the polarization curve where ionization occurs, depend on current strength but not on the composition of the solution. Polarization tends toward negative values in proportion to the increase in the pH of the solution. Vanadium

Card 1/2

L 12680-63

ACCESSION NR: AP3000648

is most easily passivated in moderately caustic solutions, with the formation of an insulating layer of vanadites. With higher potentials of over 0.6 v, repassivation occurs in caustic media, which is explained by the formation of vanadate ions. Orig. art. has: 3 tables, 6 figures.

ASSOCIATION: none

SUBMITTED: 24Oct61 DATE ACQ: 12Jun63 ENCL: 00

SUB CODE: CH NO REF SOV: 001 OTHER: 010

Card 2/2

L 16915-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG

S/076/63/037/004/016/029

AUTHOR: Shatalov, A. Ya., Bondareva, T. P.

57
56

TITLE: Kinetics of the anode oxidation of niobium in some electrolytes

PERIODICAL: Zhurnal fizicheskoy khimii, V. 37, No. 4, 1963, 868-874

TEXT: An investigation was made of the anode oxidation of niobium in solutions of mineral acids in order to determine the kinetic patterns of this process. Potential-time curves were obtained from the anode oxidation of pure niobium in 1N sulfuric, hydrochloric, phosphoric, and nitric acid solutions employing an external current with a density of 0.5-250 $\mu a/cm^2$. The anode oxidation rate in the initial stages has a constant value in conformity with the linear portion of the potential-time curves. The latter then bend toward the abscissa axis; in the stationary state a balance is established between the formation and dissolving of the oxide film. After the stationary state is reached, the higher is the anode current density, the higher will be the niobium potential. Based on an analysis of the time-potential curves during the anode oxidation of niobium in the above solutions, the equation $i = \sigma A \exp \{(B_+ + \alpha F)F\}$ is obtained for the kinetics of the process. The constants A_+, B_+, and α have different values for solutions of different composition; σ is the factor of roughness; and F is the voltage of the

Card 1/2

L 16915-63

S/076/63/037/004/016/029

Kinetics of the anode oxidation of ...

electrical field. Assuming that the time dependence of the electrode potentials of niobium in the absence of external current is due to local corrosion currents resulting from the interaction of niobium and water and using the corresponding values for A_+ and B_+, the values of the self-diffusion rate of niobium for solutions of 1N H_2SO_4 and HCl are found to be on the order of 10^{-7} a/cm^2. There are 7 figures and 3 tables. The most important English-language reference reads as follows: H. A. Johanssen, G. A. Adams, P. V. Rysselberghe, J. Electrochem. Soc., 104, 339, 1957.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State University), Voronezh

SUBMITTED: June 14, 1962

Card 2/2

L 12873-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG

ACCESSION NR: AP3002934 S/0076/63/037/006/1321/1327

AUTHOR: Shatalov, A. Ya.; Bondareva, T. P.

TITLE: Kinetics of the anodic oxidation of zirconium in some electrolytes. 1.

SOURCE: Zhurnal fizicheskoy khimii, v. 37, no. 6, 1963, 1321-1327

TOPIC TAGS: kinetics, anodic oxidation, electrolyte, zirconium

ABSTRACT: Equations for the ionic-current strength in the anodic oxidation of zirconium in 1N H_2SO_4, H_3PO_4, and KOH solutions have been derived for steady state rates of potential growth with time, assuming that the only anodic process is the formation of a ZrO_2 film. In the case of H_2SO_4 and H_3PO_4 calculation of the anodic current is carried out according to equation (1) shown in the enclosure. The corresponding expression for the KOH solution is of the form represented by equation (2) shown in the enclosure. On prolonged anodic oxidation of zirconium with constant density current a maximum potential value is obtained that remains constant, unless there is a break-through of the oxide film, which leads to an abrupt fall in potential. It has been suggested that under the influence of internal stresses a new formation of the oxide film in the steady state occurs at the same rate as its breakdown so that the effective thickness of the film remains constant. Orig.

Card 1/3

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L 8691-65 EPA(s)-2/EWT(m)/EPF(n)-2/T/EWP(b) Pt-10/Pu-4 RAEM(c)/ASD(m)-3/ASD(f)/
AFMDC RWH/JD/JG/MLK

ACCESSION NR: AT4043088 S/0000/64/000/000/0447/0460

AUTHOR: Shatalov, A. Ya.; Bondareva, T. P.; Tay*gankova, L. Ye; Khitrov, A. B.

TITLE: Anodic behavior of zirconium, niobium, and vanadium

SOURCE: Mezhvuzovskaya konferentsiya po anodnoy zashchite metallov ot korrozii. 1st, Kazan, 1961. Anodnaya zashchita metallov (Anodic protection of metals); doklady* konferentsii. Moscow, Izd-vo Mashinostroyeniye, 1964, 447-460

TOPIC TAGS: zirconium, niobium, vanadium, zirconium anodic behavior, niobium anodic behavior, vanadium anodic behavior, anodic polarization, electrode potential, zirconium passivation, niobium passivation, vanadium passivation, zirconium anodic polarization, niobium anodic polarization, vanadium anodic polarization, zirconium electrode potential, niobium electrode potential, vanadium electrode potential

ABSTRACT: In an attempt to determine passivation conditions of zirconium, niobium, and vanadium, their anodic behavior has been [illegible]. The experiments were carried out with 99.97% pure zirconium,

Card 1/3

L 8691-65

ACCESSION NR: AT4043088 2

investigated. Experiments carried out with 99.996% pure zirconium, 98.7% pure niobium, and 99.7% pure vanadium in solutions of HNO_3, H_3PO_4, KOH, and H_2SO_4 showed that the potentials of zirconium and niobium in all the electrolytes tested continuously grow with the period of application of current with a constant density, and they may reach a considerable magnitude, up to 160 v for zirconium in 1N sulfuric acid. When the current is turned off the potential drops to the original value, but with current turned on again it returns rapidly to the value it previously reached. The high potential of zirconium and niobium anodes cannot be explained solely by an ohmic voltage drop in the growing oxide film. Potenials of vanadium anode in the section of the polarization curve corresponding to the active process of ionization depend upon the current density. With the increasing pH of the electrolyte, the polarization curves shift towards negative values. Vanadium can be easily passivated in a moderately alkaline solution. In 0.01 N sulfuric acid, vanadium passivates at a current density as high as 80 ma/cm^2. The introduction of substances forming insoluble compounds in the

[illegible] vanadium ions [illegible] to vanadium

Card 2/3

L 8691-65
ACCESSION NR: AT4043088 O

presence of vanadite ions contributes to vanadium passivation. It is assumed that the vanadium passivation is due to the formation of a protective layer of vanadites. With potentials exceeding 0.6 v in an alkaline solution the formation of vanadate ions takes place, leading to overpassivation. Orig. art has: 7 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 13Mar64 ATD PRESS: 3107 ENCL: 00

SUB CODE: MM, GC NO REF SOV: 004 OTHER: 016

Card 3/3

VYALOV, O.S., akademik, otv. red.; BOGDANOVICH, A.K., red.; BONDAREVA, T.P., red.; PISHVANOVA, L.S., red.; SUBBOTINA, N.N., red.; MEL'NIK, A.F., red.

[Maikop sediments and their age analogues in the Ukraine and Central Asia; materials] Maikopskie otlozheniia i ikh vozrastnye analogi na Ukraine i v Srednei Azii; materialy. Kiev, Naukova dumka, 1964. 299 p. (MIRA 18:6)

1. Kollokvium po mikrofaune i biostratigrafii maykopskoy tolshchi i yeye vozrastnykh analogov. 1st, L'vov, 1961. 2. Institut geologii goryuchikh iskopayemykh AN Ukr.SSR (for Vyalov).

BONDAREVA, V.D.

Production line for preparing glazed candies. Khleb. i kond. prom. 1 no.5:34-35 My '57. (MLRA 10:6)
(Confectionery--Equipment and supplies)

BONDAREVA, V. I.

20623 Boyev, S.N., Sokolova, I. B. i Bondareva, V.I. K poznaniyu gel'mintofauny arkhara Kazakhstana. Izvestaya Akad. nauk Kazakh. SSR, No. 44, Seriya parazitol; vyp. 6, 1948, s. 85-98. - Rezyume na Kazakh yaz. - Bibliogr: s. 97-98

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949

SOKOLOVA, I.B.; BOYEV, S.N.; BONDAREVA, V.I.

Study of helminths of the saiga in Kazakhstan. Izv.AN Kazakh.SSR. Ser.paraz. no.7:91-94 '49. (MLRA 9:5
(Kazakhstan--Worms, Intestinal and Parasitic) (Parasites--Saiga)

BONDAREVA, V.I.

Occurrence of oribatid soil mites in pastures of southeastern Kazakhstan. Izv.AN Kazakh.SSR.Ser.paraz. no.7:95-98 '49.(MLRA 9:5)
(Kazakhstan--Mites as carriers of disease)

BONDAREVA, V.I.

"Experiment with Curing Sheep of Nematodiases by Phenothiazine in Kolkhozes"
SO: Veterinariya;Vol.26;No.2;45-48;February 1949;uncl

BONDAREVA, V. I.

K voprosu o vidovoy samostoyatel'nosti razlichnykh vidov mul'titsepsov, "Works on Helminthology" on the 75th Birthday of K. I. Skryabin, Izdat, Akad. Nauk. SSSR, Moskva, 1953, page 66.
Inst. Veterinary, Kazakh Affil, All-Union Order Lenin Academy of Agricultural Sciences in V. I. Lenin

"Relating to the Dehelminthization of Horses"
Tr. Vses. In-ta Gel'mintologii, 1953, No 5, pp 158-159

Thirty horses with strongyloidiasis were given small doses (10-16 milligrams per kilogram of body weight) of phenothyazine and this sharply reduced the number of strongyloides eggs. The larvae were excreted with the feces after dosing with phenothyazine and did not reach invasion stage. In industrial installations the treatment of horses with the drug had excellent results when given in daily doses of 5 milligrams per kilogram of body weight. (RZhBiol, No 3, Oct 54)

SO: Sum. 492, 12 May 55

BONDAREVA, V.I. and DIKOV, G.I.

(New Concerning Helminthiases of Agricultural Animals-per material submitted to the editorial office-excerpt)D.N.Antipin)

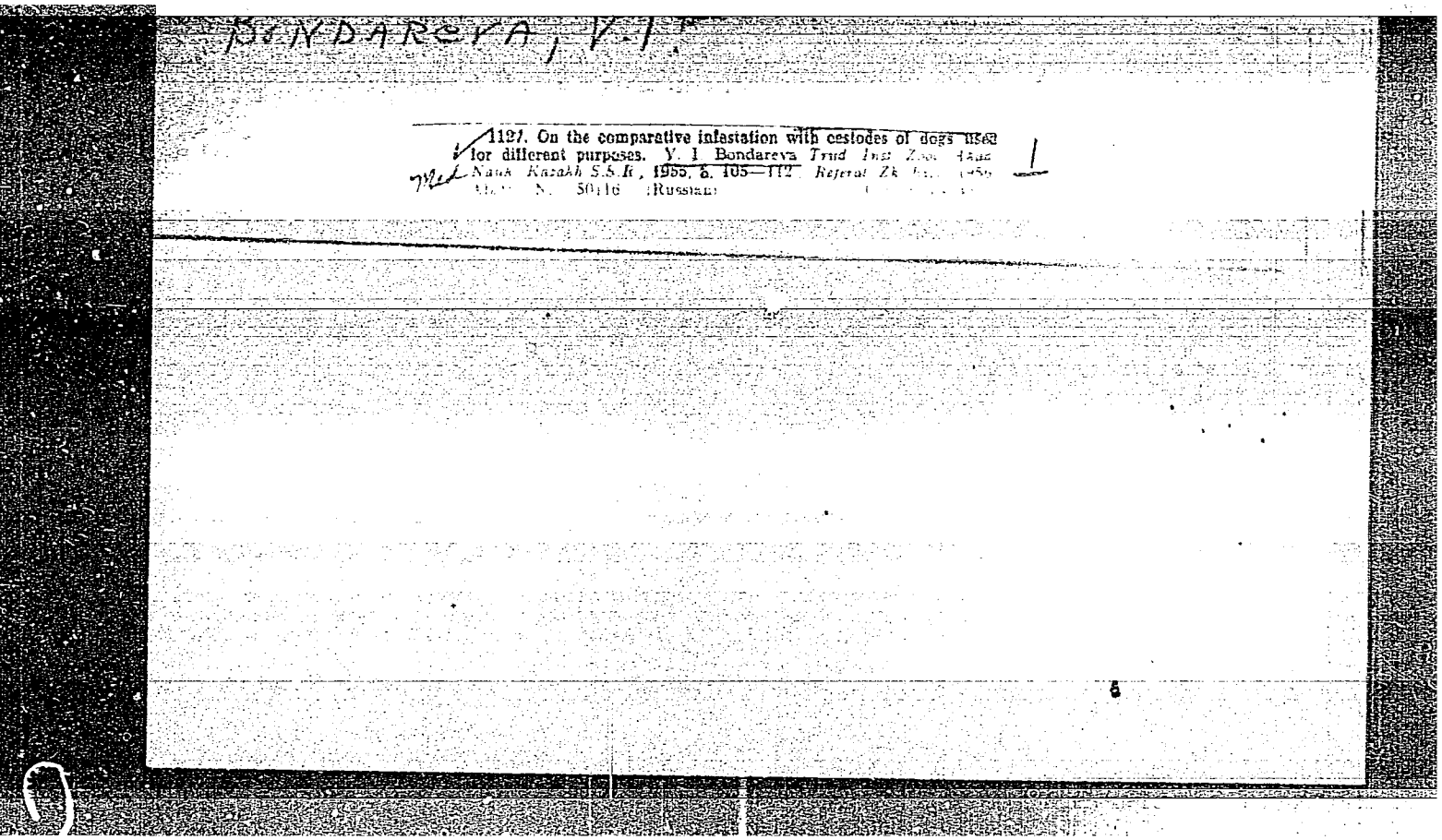
BONDAREVA, V.I. (Candidate of Veterinary Sciences)and Dikov,G.I. (Junior Scientific Coworker,Institute of Veterinary Science,Kazakh Branch of VASKhNIL).
"Squash seeds as an anti-cestode remedy in dogs".
SO:Veterinariya;Vol.31;No.4;23-27;April 1954;uncl

BONDAREVA, V.I.

Role of domestic and wild carnivores in spreading larval cestodiases. Report no.1.Trudy Inst. zool. AN Kazakh.SSR 1:126-131 '53.
(MLRA 10:1)
(Alma-Ata Province--Dogs as carriers of disease) (Parasites--Foxes)
(Cestoda)

BONDAREVA, V.I.

Role of domestic and wild carnivores in the epidemiology and epizootology of larval cestodiasis. Report no.2: Cestodes of wolves. Trudy Inst.zool.AN Kazakh.SSR 3:101-104 '55.
(Kazakhstan--Cestoda) (MLRA 9:12)
(Parasites--Wolves)



BONDAREVA, V.I.

1121. On the comparative infestation with cestodes of dogs used for different purposes. V. I. Bondareva *Trud. Inst. Zool. Akad. Nauk Kazakh S.S.R.*, 1955, 6, 105—112. *Referat Zh. Biol.* (1956) No. 50116 (Russian)

Med 1

BONDAREVA, V. I.

1130. Rôle of domestic and wild carnivorae in the epidemiology and epizootiology of larval cestodes. 2nd communication. Cestode fauna of wolves. V. I. Bondareva *Trud. Inst. Zool. Akad. Nauk Kazakh S.S.R.*, 1955, 3, 101–104; *Referat. Zh. Biol.*, 1956, Abstr. No. 50114 (Russian)

C. C. BARNARD

BONDAREVA, V.I.

Comparative rates of cestode infection of dogs of different service designations. Trudy Inst.zool. AN Kazakh.SSR 3:105-112 '55.
(Kazakhstan--Cestoda) (MLRA 9:12)
(Dogs as carriers of disease) (Parasites--Dogs)

USSR / Diseases of Farm Animals. Diseases Caused by Helminths. R-2

Abs Jour: Ref Zhur-Biol., No 2, 1958, 7340

Author : R. S. Shults, V. I. Bondareva
Inst : Not Given
Title : Concerning the Organization of Measures to Control Coeunurosis and Echinococcys.

Orig Pub: Veterinarya, 1956, No 11, 24-28

Abstract: Among the methods for the fight against coeunurosis and echinococcus the authors recommend deworming of dogs twice a year, destruction of invasive material and a complete and timely removal from the flock of the affected sheep and goats and their concentration in special groups. The authors give great importance to this method and cite arguments in favor of its expediency.

Card 1/1

USSR/Zooparasitology - Helminths. G-2

Abs Jour : Ref Zhur - Biol., No 10, 1958, 43385

Author : Bondareva, V.I.
Inst :
Title : Survival of Oncospheres of Brain Cyclophyllidea in an Open External Medium.

Orig Pub : Byul. nauchno-tekhn, inform. Vses. in-t gelmintol., 1957, No 2, 31-32.

Abstract : In an infection of lambs (at 7-8 months of age) by a culture of eggs from segments of brain cyclophyllidea which wintered under snow in Alma-Ata for a period of 160 days (from October 2, 1955 to April 2, 1956) with temperatures ranging from +20 to -23°, three were infected (a positive allergic test), and coenurosis in the brain developed in two.

Card 1/1

USSR / Zooparasitology. Parasitic Worms. G-2

Abs Jour : Ref Zhur - Biol., No. 8, 1958, No 33942

Author : Bondarova, V. I., Zverev, M. D.
Inst : Not given
Title : Experimental Infection of Foxes and Jackals by Cestode Multiceps Multiceps. -- Eksperimentalnoe zarazhenie lisits i shakalov tsestodoy Multiceps multiceps.

Orig Pub : Tr. In-ta zool. AN KazSSR, 1957, 7, 237-240.

Abstract : In feeding larvocystocoenure (?) vesicles from a sheep-brain to 3 jackals, 4 foxes, 3 pups and one badger, semi-ripened M. multiceps were found in 2 jackals, 2 pups, and one young fox. The epizootological significance of jackals in spreading sheep coenurosis and coenurosis of large horned cattle is distinguished from foxes, the role of which is evidently insignificant.

Card 1/1

11

USSR/Diseases of Farm Animals. Diseases Caused by Helminths R

Abs Jour : Ref Zhur - Biol., No 19, 1958, No 88278

Author : Bondareva V.I., Yermolova Ye.N.
Inst : Institute of Veterinary Medicine of the Kazakh Branch of the All-Union Academy of Agricultural Sciences imeni Lenin
Title : Surgical Treatment of Coenurosis in Sheep

Orig Pub : Tr. In-ta vet. Kazakhsk. fil. VASKhNIL, 1957, 8, 396-405

Abstract : No abstract

Card : 1/1

27

USSR/Diseases of Farm Animals. Diseases Caused by Helminth.. R

Abs Jour : Ref Zhur - Biol., No 19, 1958, No 88279

Author : Bondareva V.I.
Inst : Kazakh Scientific Research Veterinary Institute
Title : Experience in Controlling Coenurosis on a Sheepbreeding Farm in Southeastern Kazakhstan.

Orig Pub : Tr. Kazakhsk. n.-i. vet. in-ta, 1957, 9, 376-391

Abstract : No abstract

Card : 1/1

"Organization of Coenurosis and Echinoccoccosis Control in the Kazakh SSR."

report submitted at Fourth International Regional Conference of Asian Countries on Parasitic DIseases in Animals, 31 May to 7 June 1958, Alma Ata, Kazkakh, SSR.

Cand. Vet. Sci.; Kazakh Res. Veterinary Inst, Alma-Ata, USSR

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206220020-7"

BOYEV, S.N., akademik, prof., otv.red.; KARABAYEV, D.K., kand.veter.nauk, red.; BONDAREVA, V.I., kand.veter.nauk, red.; ANAN'YEV, P.K., spets.red.; BARANOV, M.D., red.; MELESHKO, K.L., red.; SHVYDKO, Z.A., red.; ZLOBIN, M.V., tekhn.red.

[Collection of papers on helminthology; on the occasion of Professor Rikhard Solomonovich Shul'ts' 60th birthday] Sbornik rabot po gel'mintologii; k 60-letiiu so dnia rozhdeniia professora Rikharda Solomonovicha Shul'tsa. Alma-Ata, Kazakhskoe gos.izd-vo, 1958. 402 p. (MIRA 12:4)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I. Lenina, Kazakhskiy filial. 2. Akademiya nauk Kazakh.SSR i Veterinarnaya sektsiya Kazakhskogo filiala Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina, Alma-Ata (for Boyev). 3. Kazakhskiy nauchno-issledovatel'skiy veterinarnyy institut, Alma-Ata (for Bondareva).

(Helminthology--Collections)

BONDAREVA, V. I., BOYEV, S. N. and SOKOLOVA, I. B.

"The Comparative Susceptibility of Agricultural and Wild Hooped Animals to Blind Staggers."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

Kazakh Scientific Research Institute for Veterinary Medicine and the Institute of Zoology, Kazakh Academy of Sciences (Alma-Ata)

BONDAREVA, V.I.

Specific independence of the cestode Moniezia alba parasitic in cattle. Trudy Inst.zool.AN Kazakh.SSR 12:140-144 '60.
(MIRA 13:7)
(Kazakhstan--Tapeworms)
(Parasites--Cattle)

BONDAREVA, V.I.

Changes in the infestation of sheep by cestodes in southern Kazakhstan. Trudy Inst. zool. AN Kazakh. SSR 14:67-68 '60. (MIRA 13:12)
(Kazakhstan--Cestoda) (Parasites--Sheep)

BOYEV, S.N., otv. red.; BONDAREVA, V.I., red.; GALUZO, I.G., red.; PAK, S.M., red.; SHEVCHENKO, V.V., red.; ALEKSANDRIYSKIY, V.V., red.; KHUDYAKOV, A.G., tekhn.red.

[Parasites of farm animals in Kazakhstan]Parazity sel'skokhoziaistvennykh zhivotnykh Kazakhstana. Alma-Ata, Izd-vo Akad. nauk Kazakhskoi SSR. Vol.1. 1962. 225 p. (MIRA 16:1)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut zoologii.
(Kazakhstan--Veterinary parasitology)

BONDAREVA, V. I.; BOYEV, S. N.; SOKOLOVA, I. B.

Specific independence of Multiceps skrjabini. Trudy Inst. zool. AN Kazakh. SSR 16:46-51 '62. (MIRA 15:10)

(Tapeworms)

BONDAREVA, Varvara Ivanovna; BOYEV, S.N., otv. red.; MOSKVICHEVA, L.N., red.; SUVOROVA, R.I., red.; KHUDYAKOV, A.G., tekhn. red.

[Coenurus invasions in domestic and wild animals; devastation of cerebral coenurosis in the U.S.S.R.] TSenuroznye invazii domashnikh i dikikh zhivotnykh; k devastatsii tsenuroza tserebral'nogo v SSSR. Alma-Ata, Izd-vo AN Kaz.SSR, 1963. 355 p. (MIRA 17:3)

1. Starshiy nauchnyy sotrudnik AN Kaz.SSR (for Bondareva).

BONDAREVA, V.Ya.

Some data on the mountain-forest soils of the Kuylyu River Valley. Izv. AN Kir. SSR. Ser. est. i tekh. nauk 2 no.10: 113-118 '60. (MIRA 17:3)

BONDAREVA, V.Ya.

Vertical zoning of soils in the northwestern slope of the Kuylyu-Too. Rab. Tian'-Shan' vysokogor. fiz.-geog. sta. no.6. 47-66 '62.

Soils of the different age moraines in the northwestern slope of the Ak-Shiyrak Massif. Ibid.:81-92

(MIRA 17:10)

BONDAREVA, YE. N.

"Pollution of the Air of the Industrial Area by Resinous Substances and Dust," paper presented at the Scientific Conference of the Leningrad Sanitation Institute, 8-10 May 1956.

U-3,054,017

BONDAREVA, Yu.A., nauchn. sotr.; BORODIN, A.M., nauchn. sotr.; KUZYUTIN, A.M., nauchn. sotr.; MERINOVA, L.I., nauchn. sotr.; NOVIKOV, L.I., nauchn. sotr.; KLEYNMAN, M.Ya., red.; IZHBOLDINA, S.I., tekhn. red.

[A guidebook to the State Museum of Defense in Volgograd] Volgogradskii gosudarstvennyi muzei oborony; putevoditel'. Volgograd, Volgogradskoe knizhnoe izd-vo, 1963. 124 p. (MIRA 17:3)

1. Volgograd. Gosudarstvennyy muzey oborony. 2. Gosudarstvennyy muzey oborony, Volgograd (for Bondareva, Borodin, Kuzyutin, Merinova, Novikov).

GRINENKO, V.V.; BONDAREVA, Yu.S.

Protective reactions of the grapevine and its adaptation to winter conditions. Fiziol.rast. 12 no.1:99-109 Ja-F '65.

(MIRA 18:3)

1. Severo-Kavkazskiy zonal'nyy nauchno-issledovatel'skiy institut sadovodstva i vinogradarstva, Krasnodar.

OPESKIN, A.G.; BONDAREVICH, N.N.; SAKHAROV, V.N.

Single cable grab bucket for loading bulk materials with self-propelled cranes. Rats. i izobr. predl. v stroi. no.89: 12-13 '54. (Cranes, derricks, etc.) (MLRA 9:6)

AKSEL'ROD, F.A., inzh.; ZAYTSEV, M.P., kand. tekhn. nauk; ZLOBIN, G.I., inzh.; KOCHERGIN, K.A., kand. tekhn. nauk; NEKRASOV, B.M., inzh.; SLIOZBERG, S.K., nauchnyy red.; DONSKOY, A.V., nauchnyy red.; DEMYANTSEVICH, V.P., nauchnyy red.; SARAFANOV, S.G., nauchnyy red.; BONDAROVSKAYA, G.V., red.; DORODNOVA, L.A., tekhn. red.; PERSON, M.N., tekhn. red.

[Resistance welding]Kontaktnaia svarka. [By] F.A.Aksel'rod i dr. Moskva, Proftekhizdat, 1962. 463 p. (MIRA 15:12)
(Electric welding)

OSTROUMOVA, L.Ye.; MESHCHERYAKOVA, Z.M.; BONDAREVSKAYA, I.I.

Destructive alkylation of phenol by diisobutylene. Lakokras.mat. i ikh prim. no.2:16-20 '60. (MIRA 14:4)
(Phenol) (Diisobutylene)

S/081/62/000/022/083/088
B101/B186

AUTHORS: Blagonravova, A. A., Pronina, I. A., Bondarevskaya, I. I.

TITLE: Production of graft copolymers on the basis of cellulose esters and isocyanates

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1962, 554, abstract 22P478 (Lakokrasochn. materialy i ikh primeneniye, no. 2, 1962, 4 - 7)

TEXT: A method is described of obtaining graft copolymers from nitrocellulose (NC) and acrylonitrile is described. This consists in first introducing into the molecular NC unit an incomplete allyl urethane obtained by reaction of 1,6-hexamethylene diisocyanate with allyl alcohol in molar ratio. Tests of films made from these copolymers have shown that they considerably surpass films of pure NC as to loss in weight when irradiated with UV light, and as to water resistance; they are, however, inferior as to elasticity. [Abstracter's note: Complete translation.]

Card 1/1

ACC NR: AP6035823 (N) SOURCE CODE: UR/0413/66/000/020/0030/0030

INVENTOR: Antipin, L. M.; Bondarevskaya, L. B.; Vladytskaya, N. V.; Danilov, S. I.; Zhigach, A. F.; Larikov, Ye. I.; Snyakin, A. P.

ORG: none

TITLE: Method of synthesizing lithium-aluminum hydride. Class 12, No. 186983

SOURCE: Izobreteniya, promyshlenyye obraztsy, tovarnyye znaki, no. 20, 1966, 30

TOPIC TAGS: lithium aluminum hydride, chemical synthesis

ABSTRACT: This Author Certificate introduces a method of synthesizing lithium-aluminum hydride by a reaction of sodium-aluminum hydride with lithium chloride in diethyl ether. To accelerate the process, it is carried out with additions of aluminum trialkyls. In a variant of the synthesizing process, aluminum-trialkyls are added in a quantity of 1—7%.

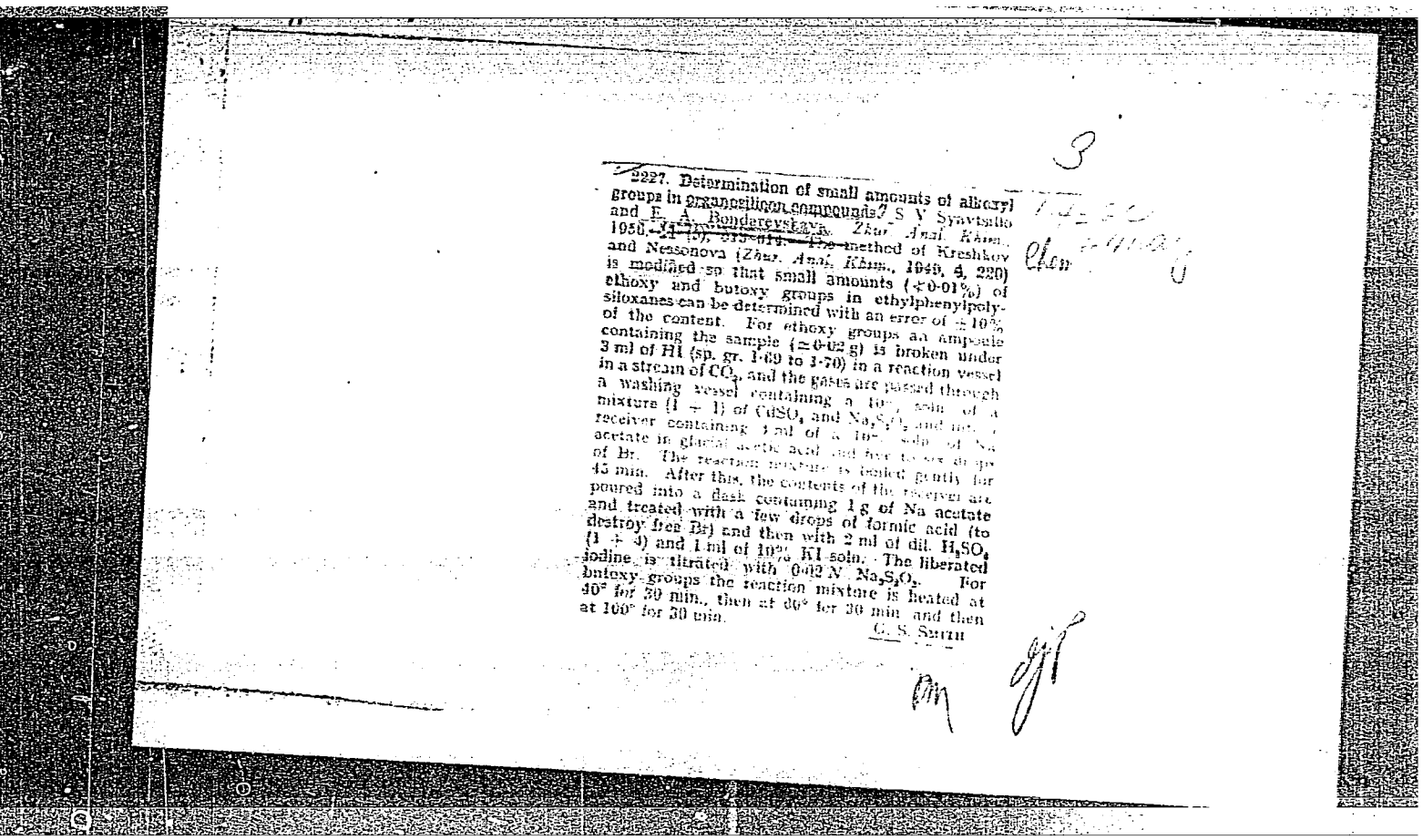
SUB CODE: 07 / SUBM DATE: 22Oct64/

Card 1/1 UDC: 661.968.546'621'34'11

ARKHIPOVICH, N.A.; BONDAREVSKAYA, V.N.; PODKOLZINA, V.P.

Using the method of 1:1 dilution for the simplification of the analysis of sugar products. Sakh. prom. 37 no.10:33-34 O '63. (MIRA 16:12)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti im. Mikoyana.



2227. Determination of small amounts of alkoxyl groups in organosilicon compounds. S. V. Syavtsillo and E. A. Bondarevskaya. *Zhur. Anal. Khim.*, 1956, 11 (5), 515–519. The method of Kreshkov and Nessonova (*Zhur. Anal. Khim.*, 1949, 4, 220) is modified so that small amounts (±0·01%) of ethoxy and butoxy groups in ethylphenylpolysiloxanes can be determined with an error of ±10% of the content. For ethoxy groups an ampoule containing the sample (≃0·02 g) is broken under 3 ml of HI (sp. gr. 1·69 to 1·70) in a reaction vessel in a stream of CO_2, and the gases are passed through a washing vessel containing a [illegible] soln. of a mixture (1 + 1) of $CdSO_4$ and $Na_2S_2O_3$ and into a receiver containing 1 ml of a [illegible] soln. of Na acetate in glacial acetic acid and five to six drops of Br. The reaction mixture is boiled gently for 45 min. After this, the contents of the receiver are poured into a flask containing 1 g of Na acetate and treated with a few drops of formic acid (to destroy free Br) and then with 2 ml of dil. H_2SO_4 (1 + 3) and 1 ml of 10% KI soln. The liberated iodine is titrated with 0·02 *N* $Na_2S_2O_3$. For butoxy groups the reaction mixture is heated at 40° for 30 min., then at 60° for 30 min. and then at 100° for 30 min.

G. S. Smith

Determination of small quantities of alkoxy groups in silicon-organic compounds. S. V. Svavtsillo, E. A. [illegible]skaya, and R. M. Polsenkina. [illegible] Anal. Chem. [illegible] 850 (English translation).—See C.A. 51, 7239h.
B. M. R.

Simultaneous determination of oxygen and halogens (chlorine, bromine, and iodine) in organic compounds. M. O. Korshun and E. A. Bondarevskaya (Inst. Hetero-org. Compds., Acad. Sci. U.S.S.R., Moscow). *Doklady Akad. Nauk S.S.S.R.* 110, 220–2(1956).—The following method is described for detn. of O and halogens in org. compds. It is based on the probability of evolution of halogens as H halides in decompn. of the sample, in contact with H_2. The sample is decompd. in a quartz test-tube as in rapid detn. of H and C (cf. *Novye Metody Mikrochem. Analiza*, 1949, pp. 56, 27 (*C.A.* 43, 8312e)), and the decompn. products are deposited on the catalyst (platinized soot heated to 900° and formed in a plug 3 cm. long (cf. Otto and Conway, *C.A.* 48, 8120e)), where they react in a stream of N_2 and pass into an absorption train of Ascarite and Anhydrone where H halide is absorbed. The CO passes into a tube with CuO heated to 100° where it oxidizes to CO_2, which is absorbed as above. Since the formation of HX occurs at the expense of H generated in the decompn., difficulties are encountered if the sample contains little or no H. Also, much HX is retained by the soot and is only slowly removed by N_2. Hence, the samples were mixed with standard hydrocarbons, such as paraffin, to supply the needed H, and a subsequent passage of N_2 readily removed the adsorbed HX. Numerous halogen and O-contg. substances were thus analyzed with error of not over 0.1–0.2%. The relative amts. of sample and paraffin are not stated.

G. M. Kosolapoff

BONDAREVSKAYA, Ye.A.

S.V. Syavtsillo, Ye.A. Bondarevskaya, A.P. Kreshkov, B.M. Luskina, A.P. Terent'yev, V.T. Shemyatenkova, and L.M. Shtifman, "The Analysis Methods of Monomer and Polymer Compounds."

Report presented at the Second All-Union Conference on the Chemistry and Practical Application of Silicon-Organic Compounds held in Leningrad from 25-27 September 1958.
Zhurnal prikladnoy khimii, 1959, Nr 1, pp 238-240 (USSR)

5(3)

AUTHORS: Korshun, M. O. (Deceased), Bondarevskaya, Ye. A.

SOV/75-14-1-25/32

TITLE: Rapid Methods of Micro-Elementary Analysis (Skorostnyye metody mikroelementarnogo analiza) Communication 16. Dependence of the Length of the Contact Layer on the Process of Decomposition in the Direct Determination of Oxygen (Soobshcheniye 16. Zavisimost' dliny kontaktnogo sloya ot sposoba razlozheniya pri pryamom opredelenii kisloroda)

PERIODICAL: Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 1, pp 123-127 (USSR)

ABSTRACT: It is known from the practice of determining carbon and hydrogen and of the simultaneous determination of C, H and other elements in organic substances that preceding pyrolysis of the substance facilitates quantitative oxidation and also the quantitative reduction of the weighed-in portion considerably (Refs 9, 57-63), because in that case not the vapors of the substance by reactive decomposition products are oxidized or reduced. By means of a similar method it is possible to effect also decomposition for the determination of oxygen. If the weighed-in portion is at first pyrolytically decomposed,

it may be expected that the decomposition products resulting herefrom will much more easily react with the contact layer (soot) at 1150° than the non-decomposed substance. A shorter layer of soot will, therefore, be found to suffice than before. As a proof of the correctness of this assumption it was found that in the case of a pyrolytic decomposition of the substance in a quartz vessel fitted into an empty quartz tube (without contact layer!) a nearly quantitative decomposition of the weighed-in portion occurs under a nitrogen atmosphere at 900-1000°, in which case up to 90% of the oxygen is separated in form of H_2O, CO and CO_2. By previous pyrolysis of the weighed-in portion the quantitative formation of carbon monoxide is rendered considerably more easy. It is, therefore, possible to reduce the length of the contact layer from 16 - 20 cm to 5 cm, and, correspondingly, also to shorten the entire quartz tube from 50 cm to 30 cm. Oxygen can also be determined quantitatively in an empty tube by fitting the soot

Rapid Methods of Micro-Elementary Analysis. Communication 16. Dependence of the Length of the Contact Layer on the Process of Decomposition in the Direct Determination of Oxygen

forming the contact layer in the vessel itself immediately above the weighed-in portion and heating it up to 1150°. Quantitatively, CO is formed. The results obtained by several determinations carried out in this manner are shown by tables. There are 3 tables and 65 references, 16 of which are Soviet.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR, Moskva (Institute of Elemental-Organic Compounds of the AS USSR, Moscow)

SUBMITTED: September 13, 1957

Card 3/3

BONDAREVSKAYA, Ye. A., Cand Chem Sci -- (diss) "Study of the modern method of direct determination of oxygen in organic compounds and development of the method of simultaneous determination of oxygen and haloid." Mos, 1958. 8 pp (Inst of Elementoorganic Compounds, Acad Sci USSR), 100 copies (KL, 18-58, 95)

SOV/75-14-4-25/30

5(3)

AUTHORS: Bondarevskaya, Ye. A., Syavtsillo, S. V., Potsepkina, R. N.

TITLE: Determination of Ethoxyl Groups in Some Organosilicon and Organoaluminum Compounds

PERIODICAL: Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 4, pp 501-503 (USSR)

ABSTRACT: The authors used for the determination of ethoxyl groups in organosilicic and organoaluminum compounds the property of these substances to hydrolyse in the presence of acids or bases. The formed ethyl alcohol can be quantitatively determined according to the conventional methods (Refs 5-9). The weighed-in sample of the substance to be analysed is mixed with a 5% solution of potassium bichromate and sulfuric acid (1:1) and heated for 30 minutes over boiling water with continuous backflow. After cooling a 10%-iodine solution is added and the separated iodine is titrated after 5 minutes with a 0.1 N solution of sodium thiosulfate. A blank test is conducted parallel to the main experiment. The accuracy and the sensitivity of this determination method for different concentrations of ethyl alcohol is listed in table 1. The authors also examined whether the

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206220020-7"

Determination of Ethoxyl Groups in Some Organosilicon and Organoaluminum Compounds

SOV/75-14-4-25/30

oxidation of the formed ethyl alcohol in the presence of diphenyl-diethoxy-silane is quantitative. The results are listed in table 2. The results show that the sensitivity of the method is 0.1 - 0.3 % and the accuracy is up to 12% (relative). Table 3 lists the results of several analyses of organosilicon compounds with various ethoxyl group content. The principle of this method was also applied for the determination of admixtures of diethyl ethoxyaluminum in triethyl aluminum. The method had to be somewhat modified as triethyl aluminum oxidizes violently in air. The paper gives a description and an illustration of the apparatus with which the weighed-in sample can be kept in an air-free atmosphere until the end of the hydrolysis. By this method the authors determined the ethoxyl group content in triethoxy aluminum and admixtures of diethyl ethoxy aluminum to triethyl aluminum. Some of the results are listed in table 4. Table 5 compares the results of this method with the results of the determination of ethoxyl groups with hydriodic acid (Ref 3). This comparison shows that both methods yield reproducible results. There are 1 figure, 5 tables, and 9 references, 6 of which are Soviet.

SUBMITTED: May 19, 1958

Card 2/2

25054
S/075/61/016/004/004/004
B107/B207

55200

AUTHORS: Bondarevskaya, Ye. A., Kuznetsova, V. M., and Syavtsillo, S.V.

TITLE: Simultaneous determination of fluorine, silicon and chlorine in organosilicon compounds containing fluorine and chlorine

PERIODICAL: Zhurnal analiticheskoy khimii, v. 16, no. 4, 1961, 472-476

TEXT: A method of simultaneous determination of fluorine, silicon, and chlorine in organosilicon compounds has hitherto not been described. The method described in this paper consists more or less of melting with metallic potassium at 900-1000°C, titration of fluorine with thorium nitrate, chlorine determination by means of thiocyanogen and acidimetric silicon determination. The latter is based on the following reaction: $Si(OH)_4 + 6NH_4F + 4HCl = (NH_4)_2SiF + 4NH_4Cl + 4H_2O$. The HCl excess is back-titrated with alkali. The method was developed on several monomeric organofluoro-silicon compounds prepared by K. P. Grinevich and A. L. Klebanskiy. Furthermore, polymers and organosilicon compounds containing chlorine and fluorine were studied. Procedure: A weighed portion of 20 to 40 mg is filled into a polyethylene ampoule or into a gelatin

Card 1/4

Simultaneous determination of ...

capsule and melted in a steel bomb with a four or five times greater amount of metallic potassium. If the compound to be analyzed contains a fluorinated phenyl radical or fluorinated alkyl radicals on silicon, melting is carried out at 900-950°C for 40-45 min. If two or more fluorinated alkyl radicals are bound to the silicon the compound is melted at 1000°C for 60 min, and, previously oxygen blown through the bomb for 2-3 min. After having cooled down, the bomb is opened, the metallic potassium excess carefully separated with water and the content quantitatively distilled into a measuring flask of 200 ml. Fluorine, chlorine and silicon are separately analyzed by titration of the respective portions: Fluorine by the method described in Ref. 1 (Ref. 1: Korshun M. O., Klimova V. A., Chumachenko M. N., Zh. analit. khimii 10, 358 (1955)), chlorine by means of thiocyanogen according to Ref. 29 (Ref. 29: Korshun M. O., Gel'man N. E., Novyye metody elementarnogo mikroanaliza (New Methods of Elementary Microanalysis), Goskhimizdat, M., 1955, p. 12). Silicon is analyzed as follows: 5-6 drops indicator are added to 25 ml which are subsequently neutralized with HCl 1:1 and 1:10, as well as with 0.1 N alkaline solution. The total volume must not exceed 50 ml. The solution is then saturated with solid KCl (30-50 mg) and again accurately neutralized with 0.1 N alkaline solu-

Simultaneous determination of ...

tion and 0.1 N acid. 2 ml of neutral ammonium fluoride solution and 10 ml 0.1 N hydrochloric acid are added, the acid excess is rapidly back-titrated with alkali. The final color change is red - green. The silicon content is calculated by the following formula:

Si (%) = $\frac{1}{a}$ $(V-V_o)\cdot K\cdot 0.7015\cdot 8\cdot 100$, where V is the volume of 0.1 N alkaline solution in ml, required for titrating 20 ml of 0.1 N HCl; V_o is the volume of 0.1 N alkaline solution in ml consumed for the back-titration of the acid excess; K is the normality factor of the 0.1 N alkaline solution; 0.7015, the silicon amount in mg corresponding to one ml of 0.1 N HCl; a, is the weighed portion in mg; 8, the coefficient corresponding to the fraction of titrated solution of the total quantity. The error of determination is below 0.5% absolute. The indicator is prepared by mixing two solutions: a) 0.1% alcoholic solution of methyl red, b) 100 ml 0.1% aqueous solution of bromcresol green with 0.5 ml of 0.1 N NaOH. 6 parts of solution a) are mixed with 5 parts of solution b). The neutral ammonium fluoride solution is prepared as follows: 40 ml of 25% ammonia are mixed with 25 ml of 40% HF. The mixture is diluted with water to one liter and , first approximatively neutralized and then against an indicator. Every day,

Card 3/4

25054
S/075/61/016/004/004/004
B107/B207

Simultaneous determination of ...

before experimental work is started, 20 ml of 0.1 HCl and 10 ml of NH_4F solution are titrated with 0.1 N KOH. If the consumption is elevated, the ammonium fluoride solution has to be re-neutralized. The titer of hydrochloric acid is established with potassium iodate against a mixed indicator. The same indicator is subsequently used for titration of 0.1 N KOH against 0.1 N HCl. There are 5 tables and 29 references: 18 Soviet-bloc and 11 non-Soviet-bloc. The two references to English-language publications read as follows: Stobba F., Analyt. Chem. 3, 298 (1924); Haszeldine R. N., Markcow R. J., J. Chem. Soc. 962 (1956).

SUBMITTED: June 14, 1960

Card 4/4

ACCESSION NR AM4006922 BOOK EXPLOITATION S/

Kreshkov, A. P.; Bork, V. A.; Bondarevskaya, YE. A.; My*shlyayeva, L. V.; Syavtsillo, S. V.; Shemyatenkova, V. T.

Practical handbook on analysis of monomeric and polymeric siliconeș (Prakticheskoye rukovodstvo po analizu monomerny*kh i polimerny*kh kremniyorganicheskikh soyedineniy), Moscow, Goskhimizdat, 1962, 544 p. illus., biblio., index. Errata slip inserted. 6,000 copies printed.

TOPIC TAGS: monomeric silicone, polymeric silicone, silicon, carbon, quality control, lacquer, enamel

PURPOSE AND COVERAGE: This book is a handbook on analysis of monomeric and polymeric silicone compounds. It gives the fundamentals of the theory and modern chemical, physical, and physical-chemical methods of analyzing silicon compounds, methods of determining their physical constants and structure, methods of analyzing the basic chemical products used in their production, and also the methods used in experimental and industrial facilities for quality control. The book is intended for engineers, technicians, and researchers of research and plant laboratories and also for students and graduate students in the field of elemento-organic compounds.

Card 1/2

ACCESSION NR AM4008922

TABLE OF CONTENTS [abridged]:

SUB CODE: CH SUBMITTED: 30Nov62 NR REF SOV: 584

OTHER: 568 DATE ACQ: 29Jul63

Card 2/2

BONDAREVSKAYA, Ye.A.; KRESHKOV, A.P.; SYAVTSILLO, S.V.; KUZNETSOVA, V.M.

Elementary analysis of fulorine-containing organosilicon compounds. Trudy Kom.anal.khim. 13:24-27 '63. (MIRA 16:5)
(Silicon organic compounds) (Fluroine organic compounds)

BONDAREVSKAYA, Ye.A.; SYAVTSILLO, S.V.; POTSEPKINA, R.N.

Determination of alkoxy groups in some heteroorganic compounds. Trudy Kom.anal.khim. 13:178-183 '63. (MIRA 16:5)
(Alkoxy groups) (Organometallic compounds)

TERENT'YEV, A.P.; LARIKOVA, G.G.; BONDAREVSKAYA, Ye.A.

Use of aluminum lithium hydride in analysis. Report No.1: Determination of active hydrogen in organic substances in ethyl ether solutions. Zhur.anal.khim. 18 no.4:514-519 Ap '63. (MIRA 16:6)

1. M.V.Lomonosov Moscow State University.
(Hydrogen--Analysis) (Organic compounds)
(Aluminum lithium hydride)

BONDAREVSKAYA, Ye.A.; KORSHUN, M.O. [deceased]

Improvement of the method for the direct determination of oxygen in organic substances. Zhur. anal. khim. 18 no.5:644-649 My'63. (MIRA 17:2)

S/020/63/148/006/017/023
B117/B186

AUTHORS: Terent'yev, A. P., Corresponding Member AS USSR,
Turkel'taub, A. M., Bondarevskaya, Ye. A., Domochkina, L. A.

TITLE: Gas-chromatographic determination of nitrogen and oxygen in organic compounds

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 6, 1963, 1316 - 1319

TEXT: A method was devised for simultaneously determining nitrogen and oxygen, the end products (N_2 and CO) being analyzed by gas adsorption chromatography. Pyrolysis is carried out in an evacuated quartz tube, in a stationary helium atmosphere. "Nickeled" carbon black (Ni:C = 1:1) is used as reducing agent; thus the pyrolysis can be carried out at 900°C. The chromatograms of the substances consisting of C,H,O,N show one peak for CO and N_2. The chromatograms of the substances composed of C,H,N have only one peak for N_2 and a straight line instead of the CO peak which is observed in substances consisting of C,H,O instead of the N_2 peak. It was shown that by the gas adsorption analysis pyrolysis products are determined more

rapidly than usual and that the separation of the individual classes of organic substances is also easier to control. Ideal conditions for the separation of individual components were obtained with an artificial gas mixture of H, O, N, CH_4, CO and CO_2. The separation column was 60 mm long, 4 mm in diameter; the sorbent used was molecular sieves of type 5 A (5A) crushed to a size of 0.5 - 1.0 mm, and dried in vacuo at 300°C for 2 hrs; the carrier gas was helium (flow rate 50 ml/min). Under these conditions H, O, CH_4, CO could be separated at room temperature. The CO_2, adsorbed at the entrance of the column, could be forced out either by helium flowing back or by heating the column to 300°C and by draining through a side tap. The conditions described above were applied to the analysis of vacuum pyrolysis gases used in direct determination of O and N in organic substances. The O and N contents were determined from the surface bounded by the corresponding peak in the chromatogram, which was compared with the calibration curves. A linear dependence was observed between the surfaces bounded by the CO or N_2 peak and the O and N content of the batches.

A number of organic substances with C, H, O and N content were analyzed by this method. There are 3 figures and 1 table.

Gas-chromatographic determination... S/020/63/148/006/017/023
B117/B186

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: September 1, 1962

Card 3/3

AKUTIN, M. S.; KORSHAK, V. V.; ROZIVILOVA, L. A.; VINOGRADOVA, S. V.; BUDNITSKIY, Yu. M.; VALETSKIY, P. M.; LEBEDEVA, A. S.; Prinimali uchastiye: BONDAREVA, Ye. A., laborant; RESHETNIKOVA, L. M., laborant; KOVALEVA, T. G., laborant

New data on the processing and properties of polyarylates. Plast. massy no.11:20-26 '62. (MIRA 16:1)

(Esters) (Condensation products(Chemistry))

L 34205-65 EWT(1)/EWT(m)/EPF(c)/EPF(n)-2/EWG(m)/EPR/EWP(j)/T/EPA(bb)-2/EWA(1)
Pc-4/Pr-4/Ps-4/Pl-4/Pu-4 RPL WW/JW/RM

ACCESSION NR: AP5005845 S/0075/65/020/002/0249/0252

AUTHOR: Terent'yev, A.P.; Bondarevskaya, Ye. A.; Potsepkina, R.N.; Syavtsillo, S.V.

TITLE: Analysis of phenylphenoxysilanes and phenyldiphenyloxysilanes

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 2, 1965, 249-252

TOPIC TAGS: silicoorganic compound, silicon determination, phenoxysilane determination, phenoxy group

ABSTRACT: Phenylphenoxysilanes $(C_6H_5)_nSi(OC_6H_5)_{4-n}$ and phenyldiphenyloxysilanes $(C_6H_5)_nSi(OC_6H_4C_6H_5)_{4-n}$ are used as high-temperature heat carries in technology, and their analysis is therefore of interest. The authors developed a simple and rapid method of determining phenoxy groups in phenylphenoxysilanes by fusion with potassium hydroxide in a stainless steel test-tube heated with a burner. The phenol formed can be determined iodometrically or bromometrically, the latter technique being preferred. silicon is determined acidimetrically. The analysis of phenyldiphenyloxysilanes was carried out by using the bromide-bromate method in a medium of glacial acetic acid and HCl. Both procedures are described in detail, and formulas are given for the calculation of % OC_6H_5, % Si, and % $OC_6H_4C_6H_5$. "The phenylphenoxysilanes and phenyldiphenyloxysilanes were synthesized, isolated in the pure form, and kindly supplied

Card 1/2

L 34205-65
ACCESSION NR: AP5005845

to us by A.G. Kuznetsova." Orig. art. has: 2 tables and 3 formulas.

ASSOCIATION: none

SUBMITTED: 17Feb64 ENCL: 00 SUB CODE: OC

NO REF SOV: 002 OTHER: 003

Card 2/2

L 14689-66 EWT(m)/EWP(t)/EWP(b) IJP(c) JD
ACC NR: AP6005878 SOURCE CODE: UR/0075/65/020/010/1054/1058

AUTHOR: Terent'yev, A. P.; Larikova, G. G.; Bondarevskaya, Ye. A.; Pravidlo, G. Ye.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Lithium aluminum hydride in analysis. Report No. 2. Determination of lithium aluminum hydride content

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 10, 1965, 1054-1058

TOPIC TAGS: hydride, lithium compound, aluminum compound, volumetric analysis

ABSTRACT: A previously described technique for determining active hydrogen in organic substances by means of $LiAlH_4$ was used to check the lithium aluminum hydride content of ether solutions and the composition of solid $LiAlH_4$. A weighed sample was decomposed with ethyl alcohol, and the hydrogen evolved was driven with the vapor of the boiling ether into an azotometer filled with a 1:1 water-ethanol mixture, which absorbed the ether vapor. From the azotometer, the hydrogen was transferred into a eudiometer for volume measurement. Analysis of three samples of 100% $LiAlH_4$

Card 1/2

L 14689-66

ACC NR: AP6005878

showed that the error does not exceed ±1%, and the results are in good agreement with the end hydrogen analysis. The method can be used for the analysis of sodium aluminum hydride and other hydrides. Orig. art. has: 4 figures, 3 tables.

SUB CODE: 07/ SUBM DATE: 030ct64/ ORIG REF: 005/ OTH REF: 009

BVK

Card 2/2

BONDAREVSKAYA, Ye.A.; BROVINA, M.Yu.; URYUPINA, L.A.

Nitriding parts made of aluminum-free steel. Metalloved. i term. obr. met. no.11:28-29 N '65. (MIRA 18:12)

1. Ryazanskiy stankostroitel'nyy zavod.

TERENT'YEV, A.P.; LARIKOVA, G.G.; BONDAREVSKAYA, Ye.A.; PRAVIDLO, G.Ye.

Lithium aluminum hydride in analysis. Report No. 2: Determination of lithium aluminum hydride content. Zhur. anal. khim. 20 no.10: 1054-1058 '65. (MIRA 18:11)

1. M.V. Lomonosov Moscow State University.

BONDAREVSKAYA, Ye.A.

Packaging machine tools for tropical countries. Za indus.Riaz. no.2:55-56 D '61. (MIRA 16:10)

1. Nachal'nik tsentral'noy zavodskoy laboratorii Ryazanskogo stankostroitel'nogo zavoda.

BONDAREVSKAYA, Ye.P.

Result of the use of colposcopy in the diagnosis of cancer of the cervix uteri and of precancerous conditions. Vop.onk. 5 no.10:466-471 '59. (MIRA 13:12)

(UTERUS—CANCER) (ENDOSCOPY)

TOMASH, K.K.; BONDAREVSKIY, A.M.

Operation of fireclay-burning rotary kilns. Ogneupory 26 no.11:498-501 '61. (MIRA 17:2)

1. Zaporozhskiy ogneupornyy zavod.

KZENDZOVSKIY, V.R.; BONDAREVSKIY, A.M.

Automatic analysis of stack gases from rotary kilns for oxygen content. Ogneupory 26 no.5:236-239 '61. (MIRA 14:6)

1. TSentral'noye protektno-konstruktorskoye byuro Glavproyektmontazh-avtomatiki (for Ksendzovskiy). 2. Zaporozhskiy ogneupornyy zavod (for Bondarevskiy).
(Kilns, Rotary)
(Gases--Analysis)

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D409/D301

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AUTHORS: Aleksandrovskiy, I.M., Bondarevskiy, A.S. and Kuzin, R. Ye. (Moscow)

TITLE: A ferrite-transistor reversive counter

PERIODICAL: Avtomatika i telemekhanika, v. 23, no. 8, 1962, 1112 - 1115

TEXT: A binary ferrite-transistor counter is described which is used in multi-channel automatic-search systems. The counter has great reliability and simplicity. Its main element is a ferrite-transistor flip-flop (shown schematically in a figure). The flip-flop differs from the ordinary ferrite-transistor circuit by the presence of the diode D and of the resistor R in the base-circuit. A second diode is connected in parallel with R. Such a flip-flop, incorporating 2 diodes, is more stable in operation than the one-diode flip-flop, described by H.R. Irons (Ref. 5: A Transistor-Magnetic Core Binary Counter. Proc. I.R.E., v. 46, no. 12, 1958). The operation of addition

Card 1/2

A ferrite-transistor reversive ...

is carried out in the inverse code which is not the case in ordinary counters; this made it possible to dispense altogether with commutators at the flip-flop outputs; thereby the circuit becomes simpler and its operation more reliable. The counter performs the operation $\Delta Q = -Q_1 + Q_2$ in 4 stages. The basic diagram of the counter is shown in a figure. Each flip-flop triggers the one that follows, so that a backward flow of information is excluded. All the ferrites of type БТ - 5 (VT-5) are semiconductor triodes of type П 16 (P16) and П 202 (P202), and diodes of type Д 7 (D7) and Д 103 (D103). The parameters of the counter are listed. The range of values of these parameters may be fairly wide. A model counter, incorporating 11 flip-flops, was laboratory-tested. It was found to be very reliable in operation, working for a long time under laboratory conditions. There are 4 figures.

SUBMITTED: March 8, 1962

ALEKSANDROVSKIY, N.M., kand.tekhn.nauk, dotsent; BONDAREVSKIY, A.S.; BONDIN, G.[illegible]

Two-channel optimalizing controller using transistors and magnetic-core elements. Trudy MEI no.50:5-24 '63. (MIRA 17:12)

ALEKSANDROVSKIY, N.M., kand.tekhn.nauk, dotsent; BONDAREVSKIY, A.S.; KUZIN, R.Ye.

Operational block of a discrete-type automatic optimization system. Trudy MEI no.50:25-42 '63. (MIRA 17:12)

L 35422-65 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) Pf-4
ACCESSION NR: AT4045207 S/2588/64/000/006/0080/0099

AUTHOR: Aleksandrovskiy, N. M.; Bondarevskiy, A. S.

TITLE: Two-channel ferrite-transistorized automatic optimizer

SOURCE: Avtomaticheskoye upravleniye i vy chislitel'naya tekhnika, no. 6, 1964, 80-99

TOPIC TAGS: automatic control system, automatic optimizer, transistorized optimizer, ferrite optimizer, two channel optimizer, automatic search hydrocarbon dehydrogenation

ABSTRACT: As understood by the authors of this article, automatic optimizers, which are a variety of self-adjusting systems, are designed to search out by the probe method the exact upper or lower limit of the function of one or several variables in a previously assigned closed region. It is noted that this problem becomes particularly important in those cases in which the function under study, along with the unknown upper or lower boundary, varies with time in an unpredictable fashion as a function of perturbations which cannot be calculated. For the automatic optimizer it is not strictly necessary that the unknown exact upper or

Card 1/4

L 35422-65

ACCESSION NR: AT4045207

limit coincide with the extremum values of the corresponding function, although this may be the case in actual practice. In the optimization of production processes the functional relations alluded to above are generally understood to be the static characteristics of the objects under consideration which express certain indices or criteria of the processes performed, such as cost, quantity or quality of the end product, etc., as a function of control effects which vary within a certain limited region. In the particular case considered in this article the object of optimization is a device for the dehydrogenation of butane into butylenes (the primary raw material in the production of synthetic [illegible]) [illegible] the installation is given in the article [illegible] [illegible] processes [illegible] ified. The significance of the optimum index Q is explained [illegible] [illegible] search measures for the acceleration (optimizat[illegible] [illegible] search is employed [illegible] [illegible] that the object of optimization has two [illegible] [illegible] the linear links of the object [illegible]

considered in which the linear links of the object channels are described by first and second order differential equations with complex-conjugate roots, and

Card 2/4

L 35422-65
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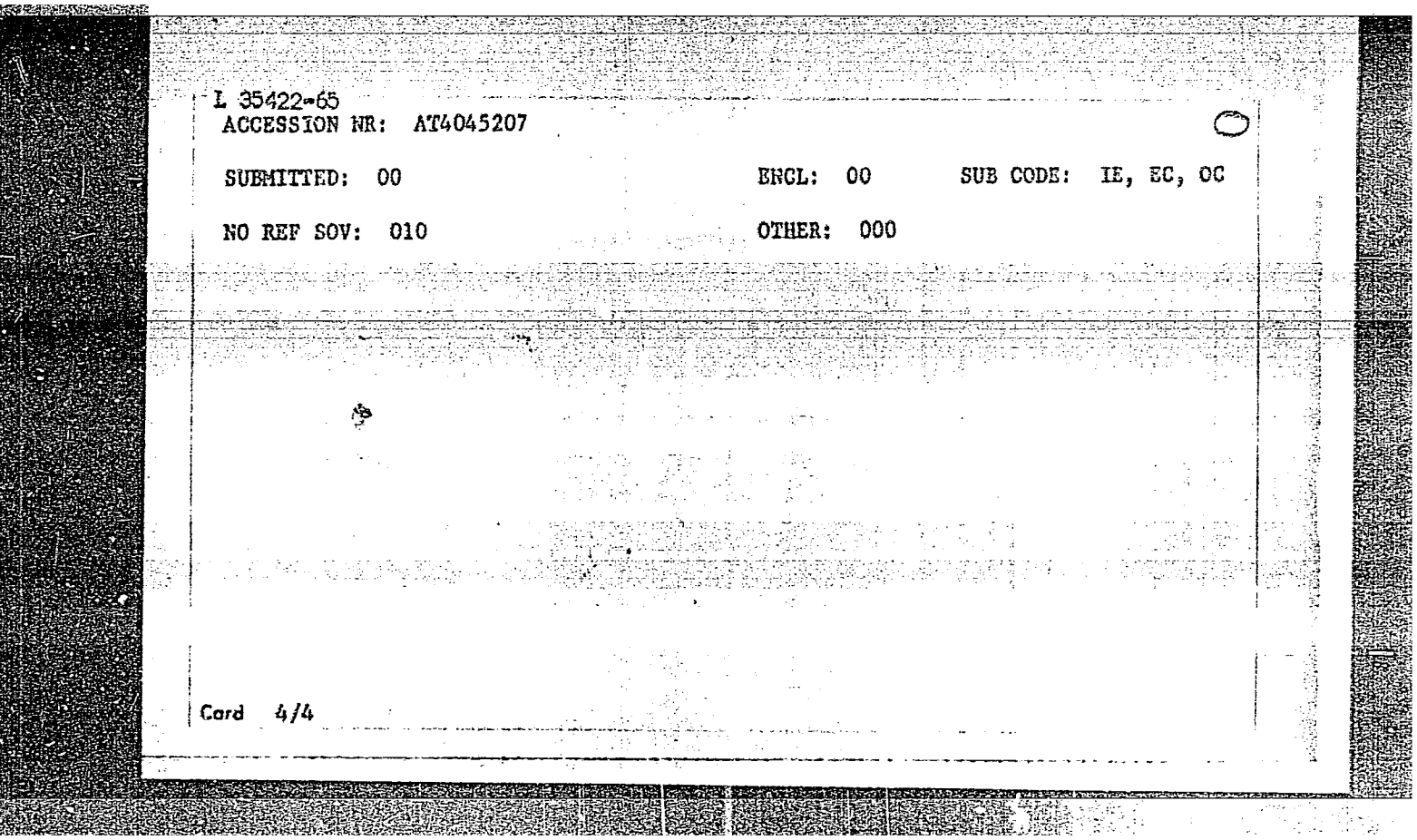
optimal phase trajectories are plotted. The automatic optimizer developed on the basis of these calculations is basically designed to use small, economical and reliable ferrite-transistor elements, with the discreteness of the operational blocks determining the overall discrete character of the entire optimizer arrangement. The latter may be described as a twin-channel extremal regulator with stepped optimized search by the gradient method. The various sub-assemblies of the optimizer (operational block, actuator block, logical circuitry, etc.) are described in detail in the article. The programming unit, which is designed to assign the operational sequence of all the elements of the automatic optimizer, is also described. The actual working of the device is discussed in a final section of the paper. The optimizer was assembled and tested over an extensive period on a twin-channel electronic model (simulator) under laboratory conditions.

of employing optimized search on multi-dimensional objects with complex dynamics." Attention is also called to the high degree of operational reliability of this ferrite-transistorized optimizer model. "Engineers R. Ye. Kuzin and O. A. Bondin took part in developing and testing the optimizer." Orig. art. has: 7 figures and 12 formulas.

ASSOCIATION: None

Card 3/4



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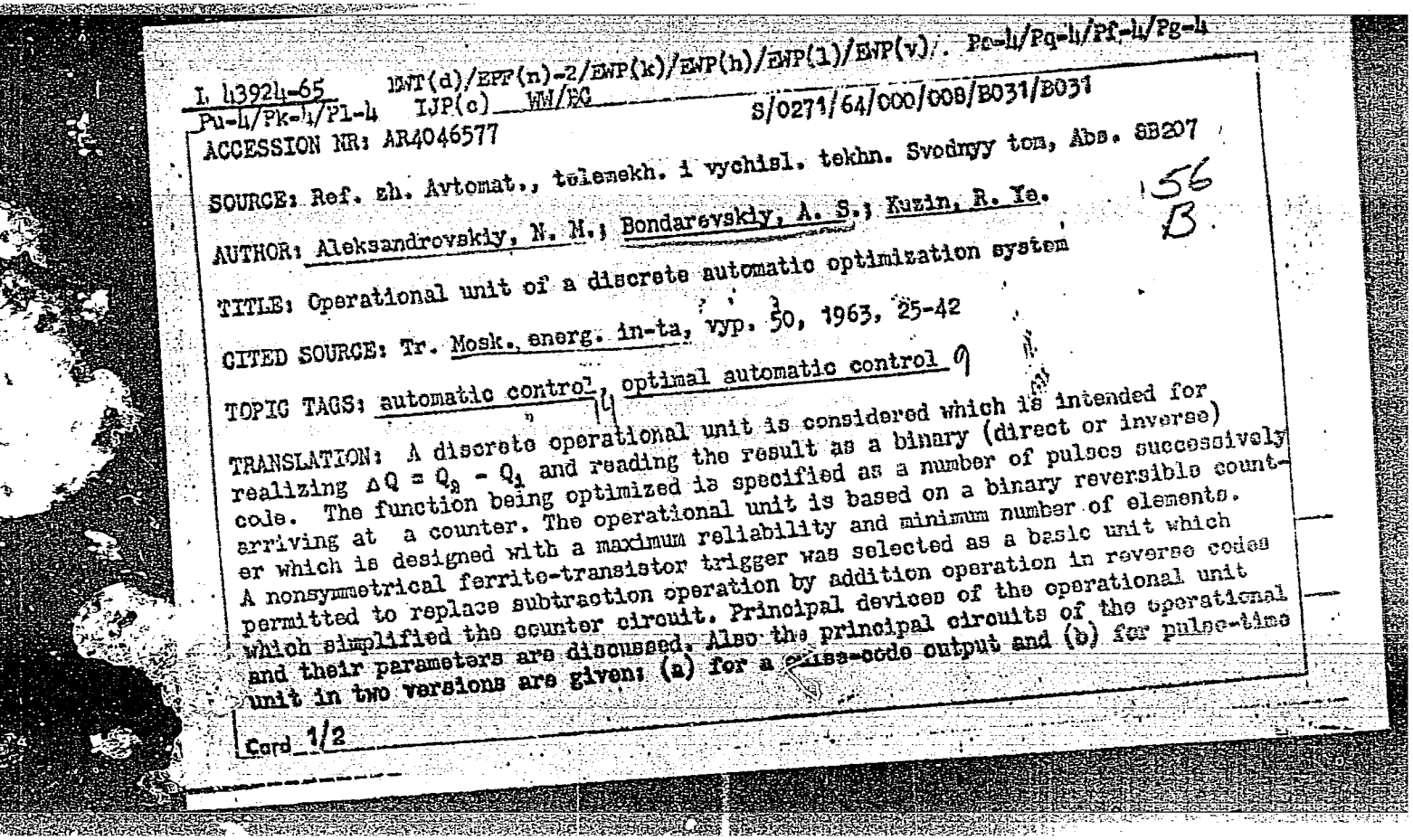
Card 4/4



L 43924-65 EWT(d)/EPF(n)-2/EWP(k)/EWP(h)/EWP(l)/EWP(v)/ Pe-5/Pq-5/Pf-5/Pg-5
Pu-5/Pk-5/Pl-5 IJP(c) WW/RC
ACCESSION NR: AR4046577 S/0271/64/000/008/B031/B031

SOURCE: Ref. zh. Avtomat., telemekh. i vychisl. tekhn. Svodnyy tom, Abs. 8B207

AUTHOR: Aleksandrovskiy, N. M.; Bondarevskiy, A. S.; Kuzin, R. Ye.

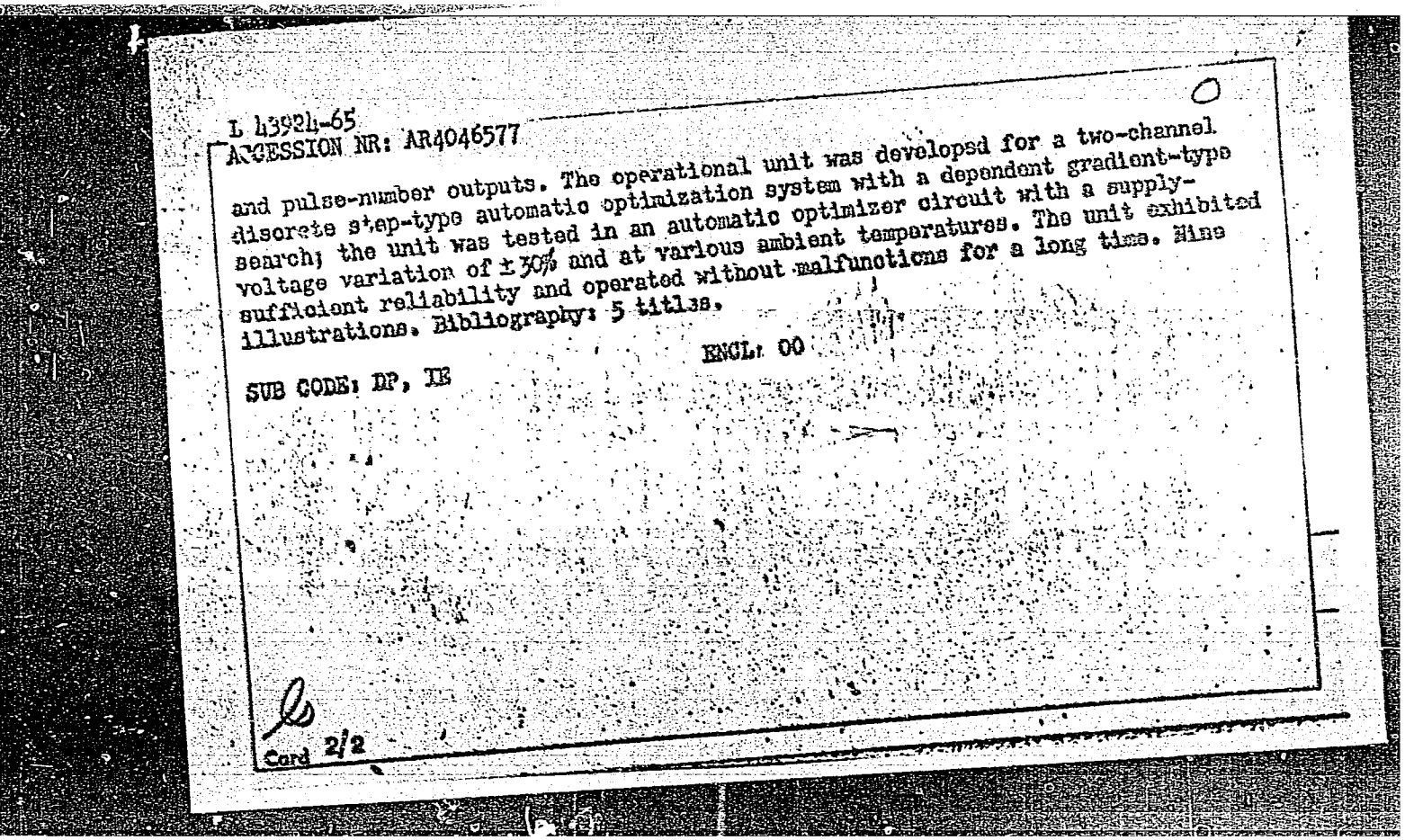
TITLE: Operational unit of a discrete automatic optimization system

CITED SOURCE: Tr. Mosk. energ. in-ta, vyp. 50, 1963, 25-42

TOPIC TAGS: automatic control, optimal automatic control

TRANSLATION: A discrete operational unit is considered which is intended for realizing $\Delta Q = Q_2 - Q_1$ and reading the result as a binary (direct or inverse) code. The function being optimized is specified as a number of pulses successively arriving at a counter. The operational unit is based on a binary reversible counter which is designed with a maximum reliability and minimum number of elements. A nonsymmetrical ferrite-transistor trigger was selected as a basic unit which permitted to replace subtraction operation by addition operation in reverse codes which simplified the counter circuit. Principal devices of the operational unit and their parameters are discussed. Also the principal circuits of the operational unit in two versions are given: (a) for a pulse-code output and (b) for pulse-time

Card 1/2



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and pulse-number outputs. The operational unit was developed for a two-channel discrete step-type automatic optimization system with a dependent gradient-type search; the unit was tested in an automatic optimizer circuit with a supply-voltage variation of ±30% and at various ambient temperatures. The unit exhibited sufficient reliability and operated without malfunctions for a long time. Nine illustrations. Bibliography: 5 titles.

ENCL: 00

SUB CODE: DP, IE

Card 2/2